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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/760,244 | 01/21/2004 | Kia Silverbrook | RRA12US | 1581 |
| 24011 7590 12/28/2006 SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, NSW 2041 AUSTRALIA | | | EXAMINER GARCIA JR, RENE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2853 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 12/28/2006 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/760,244

Applicant(s)

SILVERBROOK, KIA

Examiner

Rene Garcia, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10 October 2006 has been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “concertina folds attached to the rigid wall sections”; “rigid wall section is configured to prevent the outlet from being obstructed by any other part of the ink storage reservoir as the volume decreases” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Applicant’s indication, on page 3 of remarks/arguments filed 10 October 2006, that basis for amendments can be seen in figure 9 is insufficient support. Figure 9 fails to show an adequate representation of claimed limitation “concertina folds”. It is examiner’s position that the illustration shows a shaded portion that could indicate a structure such as ink within the region. No additional figures are present to aide in understanding how “concertina folds” or “outlet being obstructed” can be inferred by figure 9.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: “concertina folds attached to the rigid wall section”; “rigid wall section is configured to prevent the outlet from being obstructed by any other part of the ink storage reservoir as the volume decreases” of claim 1.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 has limitations with regards to collapsible membrane providing "...concertina folds attached to the rigid wall sections...", "rigid wall section is configured to prevent the outlet from being obstructed by any other part of the ink storage reservoir as the volume decreases" and applicant's remarks/arguments filed 10 October 2006 indicate figure 9 provides support for amendments. Upon looking at figure 9 examiner is unable to properly identify how figure 9 provides such support. Figure 9 has ink storage membrane/26/ but fails to show any features recognizable as "concertina folds". Within the area defined as ink storage membrane/26/ are evenly spaced diagonal lines that, examiner's interpretation, represent the ink storage membrane/26/ as being filled with ink or the structure itself, and cannot interpret "concertina folds" from this figure alone. No other figure present a different view of this structure that lends support to define "concertina folds". The specification also fails to provide support for the claim limitations or how the figures may represent such structure. In particular specification on page 6, lines 13-27; page 27, lines 22-29 provides the most relevant details regarding the structure and utilization of ink storage membrane/26/. This also fails to provide any further disclosure to enable one with ordinary skill to utilize "concertina folds attached to the rigid wall sections" and "rigid wall section is configured to prevent the outlet from being obstructed by any other part of the ink storage reservoir as the volume decreases".

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6. Claims 2, 3 & 4 are rejected because of their dependency upon claim 1 under 35 U.S.C. 112 1st paragraph.

Response to Amendment

7. The amendment filed 10 October 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claim 1 adds limitations regarding "...concertina folds attached to the rigid wall sections..." and "rigid wall section is configured to prevent the outlet from being obstructed by any other part of the ink storage reservoir as the volume decreases".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook (US 6,158,850) in view of Burger (US 5,187,498).

Cook disclose the following claimed limitations:

*regarding claim 1, printer cartridge/**cartridge assembly, 10/** for an inkjet printer/11/ including: (fig. 1; col. 5, lines 41-54)

*ink storage reservoir/**base ink reservoir, 20/** (fig. 1)

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*printhead/**13/** in communication with said ink storage reservoir/**20/** (fig. 1; col. 5, lines 55-57)

*refill port/**ink passage, 16/** (fig. 1) in communication with the ink storage reservoir/**20/** and arranged to receive refill ink/**ink reservoir, 18/** for replenishing the ink storage reservoir/**20/** (fig. 1; col. 5, line 65 – col. 6, line 5)

*integrated circuit assembly/**memories, 28 & 30/** (fig. 1; also includes printer electronics/**27/** and microprocessor/**36/** - col. 6, lines 30-38 & col. 8, lines 15-26) arranged to store information relating to the properties of at least one of the refill ink/**ink reservoir, 18/** and the ink stored in the ink storage reservoir/**base ink reservoir, 20/** (col. 7, lines 25-35)

*regarding claim 2, information relating to the properties of the refill ink/**18/** or the ink stored in the ink storage reservoir/**20/** includes any of:

*amount of ink remaining in the ink storage reservoir/**20/** (fig. 1; ink level sensor/**38/** - col. 8, lines 59-61)

*origin of the refill ink/**18/** (col. 7, lines 41-52 & col. 9, lines 21-27)

*rheological/**formation of ink supply/** properties of the refill ink/**18/** (col. 9, lines 21-27)

*color of the refill ink/**18/** (col. 7, lines 19-21 & col. 8, lines 22-26 & col. 9, lines 21-27)

*regarding claim 3, integrated circuit assembly includes an electrical contact mounted upon the inkjet printer/**11/** for connection with an integrated circuit of a refill

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cartridge/**secondary tank, 12/** containing the refill ink/**18/** (col. 6, lines 30-38 & col. 8, lines 27-37)

Cook does not disclose the following claimed limitations:

*regarding claim 1, ink storage reservoir at least partially defined by a collapsible membrane and partially defined by rigid wall section, the rigid wall sections defining an outlet for sealed storage of ink

*printhead in sealed fluid communication with said ink storage reservoir via the outlet

*collapsible membrane provides concertina folds attached to the rigid wall section that allow the ink storage reservoir to decrease its volume as ink is fed to the printhead and the rigid wall section is configured to prevent the outlet from being obstructed by any other part of the ink storage reservoir as the volume decreases

Burger discloses the following:

*regarding claim 1, ink storage reservoir/**bellows, 12/** at least partially defined by a collapsible membrane/**bellows/** and partially defined by rigid wall section, the rigid wall sections defining an outlet for sealed storage of ink/**22/** (fig. 2 & 3; col. 4, lines 36-49; col. 5, lines 4-28)

*printhead/**54/** in sealed fluid communication with said ink storage reservoir/**12/** via the outlet/**24/** (fig. 3; col. 5, lines 40-49)

*collapsible membrane/**12/** provides concertina folds/**bellows/** attached to the rigid wall section that allow the ink storage reservoir/**12/** to decrease its volume as ink/**22/** is fed to the printhead/**54/** and the rigid wall section is configured to prevent the outlet/**24/**

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from being obstructed by any other part of the ink storage reservoir/12 as the volume decreases (fig. 2 & 3; additional see col. 2, lines 28-37)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize an ink storage reservoir at least partially defined by a collapsible membrane and partially defined by rigid wall section, the rigid wall sections defining an outlet for sealed storage of ink, printhead in sealed fluid communication with said ink storage reservoir via the outlet, collapsible membrane provides concertina folds attached to the rigid wall section that allow the ink storage reservoir to decrease its volume as ink is fed to the printhead and the rigid wall section is configured to prevent the outlet from being obstructed by any other part of the ink storage reservoir as the volume decreases as taught by Burger into Cook for the purposes of aiding in the flow of fluid from ink container to the print head; and providing proper fluid flow between ink container and print head.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook (US 6,158,850) as modified by Burger (US 5,187,498) as applied to claim 1, and further in view of Waller et al. (US 6,250,738).

Cook as modified by Burger disclose all of the claimed limitation except for the following:

*regarding claim 4, printhead is a pagewidth printhead

Waller et al. disclose the following:

*regarding claim 4, printhead is a pagewidth printhead/**page-wide-array printhead/** (col. 1, line 56) (fig. 1; includes inkjet printhead assembly/12/, ink supply assembly/14/, and mounting assembly/16/)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to utilize printhead as a pagewidth printhead as taught by Waller et al. into Cook as modified by Burger for the purpose of printing one or more lines at a time.

Response to Arguments

11. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

12. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., keeping ink sealed from air/limiting ink's exposure to air) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

13. In response to applicant's arguments on page 4 that Childers bag/22/ when side walls are "folded" will obstruct outlet is seen differently by examiner. The claim lacks sufficient definition with regards to "obstruct" and is seen that when sides are in direct plane parallel to flow of ink through outlet that the ink is near complete depletion from bag/22/ and therefore would not be construed as obstruction. Also it is noted that claim limitation regarding this issue specifically asserts that "any other part of the ink storage reservoir" will not obstruct outlet. Absence of appropriate figures to further aid in how applicant's invention is to be utilized with regards to this raises issue not disclosed in the specification. For instance regardless of how the bag/ink storage reservoir/ collapses, either in a vertical [perpendicular to flow of ink through outlet] or horizontal [parallel to

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flow of ink through outlet], a portion of the bag will always to some degree present obstruction, portion being either a side wall/portion in vertical direction or back wall/portion in horizontal direction.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohinata (US 5,979,326) teaches a collapsible ink container such that as the volume is decreased and the structure's size is reduced the sidewalls do not provide obstruction of the outlet. Ishizawa et al. (US D513,417 S), Nakamura et al. (US 6,220,702) and Mochizuki et al. (US 6,267,474) teach a flexible bag that has folds in a manner similar to bellows of Burger, however the direction of collapsing/folding is perpendicular to direction of Burger.

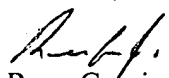
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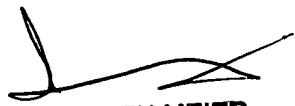
Communication with the USPTO

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rene Garcia, Jr. whose telephone number is (571) 272-5980. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Rene Garcia Jr
12/06


STEPHEN MEIER
SUPERVISORY PATENT EXAMINER